

POLISHING SLURRY FOR THE CHEMICAL-MECHANICAL POLISHING
OF METAL AND DIELECTRIC STRUCTURES

ABSTRACT OF THE DISCLOSURE

The invention relates to a polishing slurry for the chemical-mechanical polishing of metal and metal/dielectric structures, containing from about 2.5 to about 70% by volume of a silica sol which contains 15 to 40% by weight of SiO₂ particles and is stabilized by H⁺ or K⁺ ions, wherein the SiO₂ particles have a mean particle size of less than 300 nm, from about 6 to about 10% by volume of hydrogen peroxide and a base in a quantity which is appropriate to set the pH (22°C) of the polishing slurry to from about 5 to about 1.5, has a Ta removal rate of > 300 Å/min and an improved selectivity. Method for making and using such a slurry.